Cellular and Molecular Life Sciences

Index Vol. 58 2001

Birkhäuser Verlag Basel · Boston · Berlin



Scope

The multidisciplinary journal CMLS, Cellular and Molecular Life Sciences publishes research articles, mini-reviews, reviews and multi-author reviews covering the latest aspects of biological and biomedical research. The journal will consider contributions focusing on molecular and cellular aspects of biomedicine, cell biology, immunology, molecular genetics, neuroscience, biochemistry, pharmacology, and physiology related to pharmacology.

Editor-in-chief

Professor Dr. P. Jollès Muséum National d'Histoire Naturelle Laboratoire de Chimie des Substances Naturelles ESA 8041 CNRS 63, rue Buffon F-75005 Paris / France e-mail: Pierre.Jolles@lmcp.jussieu.fr

Editorial Office

CMLS Birkhäuser Verlag P.O. Box 133 CH-4010 Basel / Switzerland

Tel. +41 61 205 07 68 Fax +41 61 205 07 95 e-mail: CMLSedit@birkhauser.ch

Visit our Web site http://www.birkhauser.ch

Editorial Board

K.J. Clemetson, Bern
K.J.A. Davies, Los Angeles, CA
G. Dirheimer, Strasbourg
K. Eichmann, Freiburg
J.-M. Frère, Liège
T. Imoto, Fukuoka
H. Jörnvall, Stockholm
R.I. Norman, Leicester
H.-G. Rammensee, Tübingen
C. Richter, Zürich
R. Timpl, Martinsried

Advisory Board

C.C.F. Blake, Oxford E. Carafoli, Padova R.J.-Y. Chang, Houston, TX U. Feige, Thousand Oaks, CA M. Go, Nagoya T. Kadowaki, Tokyo T. Kirchhausen, Boston, MA K. Kuchler, Wien F. Mayor Jr., Madrid P.J. Neame, Tampa, FL M. Parnham, Zagreb I. Pecht, Rehovot P. Potier, Gif-sur-Yvette J. Slaninová, Praha P. Venetianer, Szeged C. Wernette, Auburn, AL C. Wiessner, Basel

Subject Index

14-3-3 1907

ABC transporter 931 **ACAT 1113** Accessory olfactory bulb 546 Acetylation 721 2-Acetylaminofluorene 1141

Acitvity-dependent development 1054

Actin cytoskeleton 1607 Actinomycin D 485 Active zone 94

Acute-phase protein 850 Adaptation 125, 1216 Adipose tissue 470

ADP ribosylation factor 1674

Aequorin 1666 Ageing 470, 477 Aging 1150 Agonist 321, 1133

Agouti signaling protein 434 Agouti-related protein 434 Agrobacterium tumefaciensmediated transformation 2043

AIDS 1879 Akt 1150

Alcohol dehydrogenase 1719 Aldehyde dehydrogenase 1719

Aldo-keto reductase 1323

Alignment 1003 Alkaloid 321 Allometry 815 Allopregnanolone 1263

Alternative splicing 1943 Amino acid sequence 1538 Amino acid sequences 1179

Amino acids 61

Aminoacylation identities 1547

Ammonium 61 **AMPA 921** Amphiphilicity 1179

Amplification of chirality 44

Amyloid 1491, 1857 Androgen receptor 2129 Angiogenesis 351

Antagonist 321, 1133 Anti-Bcl-2 antibody 653

Anti-inflammatory cytokine 442 Antibiotics 1179

Antigen presentation 1461 Antiinflammation 1234

Antimicrobial 978 Antioxidant capacity 1528

Antisense RNA 960 Antisense strategy 141 Apical targeting 1067

ApoA-I 885

Apocrine gland 1344

Apoptosis 135, 244, 298, 356, 485, 653, 1036, 1442, 1636, 1708, 1737, 1781, 2085

Arabidopsis 194, 1121

Arabinogalactan protein 1363, 1386 Arabinogalactan proteins 1418

Arabinogalactan-proteins 1399 Arabidopsis thaliana 1475

Arginase 1350 Arp2/3 complex 1607

Arteriosclerosis 4 Assimilatory 215

Atherosclerosis 1113 ATP-dependent chromatin remodelling 673

ATPase 931

AU-rich element 266

Autoimmune thyroid disease 1301

Autoimmunity 902 Autonomic function 1206

Axillary 1344 Axon 1054

Axon guidance 531 5-azacytidine 721

B lymphocyte 259 Bacillariophyceae 1666

Bacteria 1650 **BAD 1708**

Barrier-to-autointegration factor

Basolateral sorting 1067

Basonuclin 625 Bassoon 94 **BBMV 1961** Bcl-X 1688 **BDNF 1054**

Behavioral recovery 538

Belt 885

Benign prostatic tissue 307

Binding kinetics 794 Bioassay 321, 1133 Biofilm 1562

Biomimetic environment 1572

Biosensor 794

Biosynthetic pathway 1969

BIT 117

Bloom's syndrome 894

Body mass 815 Brain 1206, 1842

Brassinosteroid 321, 1133

Breast cancer 244 Bromelain 1234 Brownian dynamics 1451

Bulbectomy 538 Bullfinch 1159 Butyrate 728

Butyrylcholinesterase 1327

Ca2+-ATPase 312

Caco-2 1327

Calcineurin 278 Calcium 921, 1727

Calcium transport 636

Calsequestrin 312

cAMP 1301 Canary 1159

Cancer 1189

Carbohydrate 1650

Carbonyl-metabolising enzymes 1719

Carboxypeptidase Z 1790

Carcinogen bioactivation 1805

Carduelini 1159, 2117 Carduelis 2117

Carica papaya 556

Caspase 356, 1688, 1950 Caspase-3 485

Castasterone 1133

Catalytic mechanism 2136

Cathelicidin 978 Cathepsin G 978

Caveolae 2053

Caveolin-1 1113

CAZ 94 CD-1 1461

CD1544

CD1d 442

CD40 4 CD47 117

CDK 1907 Cell adhesion 371

Cell aging 2108

Cell cycle 80, 244, 571, 580, 1150, 1636, 1737, 1758, 1907

Cell death 1688

Cell extension 1363 Cell migration 1189

Cell proliferation inhibitor 1340

Cell surface 1399

Cell wall 1386, 1399, 1430 Cell wall protein 1363

Cell-free system 298

Cellular senescence 1150 Cellulose synthesis 1475

Centrosome 1774

Cephem antibiotic biosynthesis 835

Ceramide 2053 Cerebellum 1950

Cervical cancer 1923 cGMP 2129

Chemokine 978 Chemoreception 510

Chemosensory 546 Chemotaxonomy 1121

Chemotopic 520

Chick 645

Chlorate 225 Chloride channel 510 Chloroplast biogenesis 420 Chloroplast nitrite transport 225 Cholesterol 1969 Cholesterol biosynthesis 1344 Cholesterol esterification 1113 Cholinesterase 1327 Chromatin 683, 704, 1781 Chromatin assembly 665 Chromatin regulation 693 Chromatin remodeling 721 Chromatin structure 1758 Chromosomal aberration 1141 Ciliary neurotrophic factor (CNTF) 1003, 1021 CIP 1907 Classification 72 Cloning 148 Closed loops 492 Co-oxidation 1805 Coactivator 289 Coat protein 1067 Cockayne syndrome 2085 Coding 520, 531 Codon bias 125 Cointegrase 403 Combinatorial 520 Comparative anatomy 148 Complement 978, 1727 Complementary tumor therapy 1234 Confocal scanning laser microscopy Conformation 1572 Congenital disease 1085 Congenital disorders of glycosylation 1085 Congenital dyserythropoietic anemia 1085 Cooligomerization 343 Corepressor 289 Cortex 1054 cRet 1021 Creutzfeldt-Jakob disease 259 Cross-talk 278 Crossbill 1159 CSTX-9/CSTX-1 1538 CTE 1105 Cu,Zn superoxide dismutase 1451 Cucurbitacin 321 Cupiennius salei 1538 Cyclic nucleotide-gated channel 510 Cyclic tetrapeptides 704

Deacetylase 1715 Death receptor 356 Defensin 978 Dendrite 1054 Dendritic nucleation 1607 Denitrification 165 2-deoxy-D-ribose 653 Detection 1276 Development 470, 645, 1737, 2008 Diabetes 1327 Diatoms 1666 Dietary fiber 728 Diffusion control 1451 DiGeorge 1296 Dihydropyridine receptor 312 Dipalmitoyl phosphatidyl choline Dissimilatory 215 Disulphide bridge 1538 DNA adduct 1141 DNA methylation 721 DNA methyltransferase 721 DNA polymorphism 125 DNA replication 665, 857, 1748 DNA strand break 1141 DNA transfection 844 Dolichol 1461 Dorsal root ganglion 1036 Drosophila 1715 Drug metabolism 737 dsRBP-Zfa 625 3D-structure 1179 Dunnigan-type partial lipodystrophy Dynamics 2069 E-selectin 141 Early protein 1923 1234

Ebola virus 1826 Ecdysteroid 321, 1121, 1133 Ecophysiology 1666 Edema prevention and destruction **ELAV 266** Electron microscope 298 Electron shuttle 1562 Electrophysiology 921 Electrospray ionisation 868 Electrospray ionisation mass spectrometry 1538 Electrostatics 1451 Electrostatistics 1216 Embryogenesis 645 Embryonic development 1296 Emery-Dreifuss muscular dystrophy 1737, 1741, 1748 Enantiomeric excess 343 Endo-1,4-β-glucanase 1475 Endo-β-1,4-glucanase 1167 Endocytic pathway 1969 Endocytosis 94, 393

Endogenous 1167 Endosymbiosis 1666 Enolase 902 Enzyme inactivation 835 Enzyme isolation 1323 Epigenetic inheritance 683 Epimerase 1650 Epimerisation 1650 Erythrocyte 1727 Erythroid 2008 Estradiol binding 636 Ethanol 1950 Evolution 72, 801, 1583, 2117 Exocytosis 94, 393 Expansin 1363 Extensin 1363, 1386 Extensins 1418 Extracellular electron transfer 1562 Extracellular matrix 371, 1790, 1842

Factor V 148 Farnesyltransferase inhibitor 1636 Fertilization 1737 [Fe-S] centres 179 Fibrillin-1 1698 Fibrillinopathy 1698 Fibrinolysis 1234 Filopodia 371 Filovirus 1826 Flow cytometry 653 Focal adhesion 371 Follicular dendritic cells 259 Formation of organic compounds 44 Fragile X-syndrome 728 Free radical 1442, 1805 Freezing 343 Frizzle-related proteins 1790 Frizzled receptor 1790 Fructose transport 1961 Frustule 1666 Frustulins 1666 Fucose metabolism 1085 Fucoxanthin 1666 Functions and pathways 72 Fusion 1189

G-protein receptor 1583
G1 phase 80, 580
G1-phase arrest 580
GABA_A receptor 1263
GATA-1 2008
GATA-3 1296
GDNF 1061
Gene 1167
Gene expression 420, 683, 1923
Gene mapping 148
Gene regulation 673, 693, 1014
Gene targeting 531
Genetic recombination 894
Genetic transformation 1666
Genomic instability 857, 894

Cytokine 801 DAP-12 117

Cyclin D 990

CYP 737

Cyt b 2117

Cylindrotheca fusiformis 1666

Cytochromes P450 737

Geranylgeranylacetone 1522 Germ cells 1737 Glial cell-derived neurotrophic factor (GDNF) 1021 Glial-derived neurotrophic factor Glomeruli 520 Glomerulus 531 Glucocorticoids 1599 Gluconeogenesis 477 Glycoside-hydrolase 1167 Glut1 645 Glut3 645 Glut4 645 **GLUT5 1961** Glutathione conjugation 1805 Glycine clearance 760 Glycine receptor 760 Glycine uptake 760 Glycine-rich protein 1430 Glycolipid antigen 442 Glycopeptidolipid (GPL) 2018 Glycosaminoglycan 1842 Glycosylation 1085 Glycosyl hydrolase 556 Glycosyltransferase 1475 GNAT (Gcn5-related acetyltransferases) superfamily 693 Goldfinch 1159 GPI-anchor 1969 Granulocyte-macrophage colony-stimulating factor 442

Haems 179 Haptenic oligosaccharides 2018 Haptoglobin 850 **HAT 728** HCV 1276 HDAC 728, 1715 HDR syndrome 1296 Helicases 857 HER2 1907 Heterochromatin protein 1 1758 Heterocyclic inhibitors 596 Heterogeneity 1276 Heterokonts 1666 Hippocampus 1263 Histamine 850 Histone 665 Histone acetylation 683, 704, 728, Histone acetyltransferases (HATs) Histone deacetylase 704, 721 Histone modifications 693 Histone-like proteins 683

Greenfinch 1159

Growth factors 80

Grosbeak 1159

HL-60 485

HLA-G 1943 **HRGPs 1363** Hsp70 1522 Hu proteins 266 Human diploid fibroblast 2108 Hydrogen peroxide 485, 990 Hydrogen peroxide release 1528 20-hydroxyecdysone 1121, 1133 Hydroxyl radical 485 Hydroxyproline glycosylation 1363 Hydroxyproline-rich glycoprotein 1363, Hydroxyproline-rich glycoproteins 1386 Hyperthyroidism 1301 Hypothyroidism 1301

Hypoxia 1150 ICAM-1 141 Ikaros 625 Imaging 520 Immune class regulation 1879 Immunity 4, 978, 1826 Immunocytochemistry 653 Immunomodulation 1234 Importin B 1766 IN-RT fusion protein 1246 Infarction 351 Infectious disease 1350 Inflammation 4, 801 Inhibitor cystine knot (ICK) structural motif 1538 Inhibitor design 596 Inhibitory receptor 117 Inhibitory synapse 760 **INK4 1907 iNOS 1708** Insect-plant 1121 Insertion sequence 403 Insulin 1327, 1950 Integrin 1189 Integrins 80 Interdigital webs 1688 Interferon-y 442 Interleukin-4 442 Interleukin-6 1061 Interleukin-12 442 Intracellular protein trafficking 1741 Invertebrate 801, 1167 IPLB-LdFB insect cell line 653 Iron (II) 835 Iron respiration 1562 IS21 family 403 IS30 403 IS911 403 Ischemia 1708 Ischemia-reperfusion 1528 Isolated mitochondria 477 **ITAM 117 ITIM 117**

KARAP 117 Ketogenesis 477 Kidney 1061, 1961 Kinase 205 KIP 1907 KLF 625 Knockout 850 Kunitz 556

JAK 1627

JNK 1045

β-Lactam antibiotics 1897 Lamin 1781 Lamin B receptor 1741, 1758 Lamina 298, 1774 Lamina-associated polypeptide 1758 Lamina-associated polypeptide 1741 Lamins 1758 Laticifer 556 Lectin 801 Legumes 61 Leishmaniases 1879 Leukemia 728 Leukocyte adhesion deficiency 1085 Light regulation 420 Limb-girdle muscular dystrophy 1741 Limonoid 321 Linnet 1159 Lipase 556 Lipid 1067 Lipid kinase 1067 Lipid rafts 2053 Lipid 1327 Lipo-glucan 1475 Lipocalins 503 Lipoxygenase induction and inhibition 1805 Listeria 1607 Liver 1061 Long-term potentiation 921 Lymphocyte 1061 Lymphocytes 1599

Macrophage 1727 MAF1 1774 Mannose metabolism 1085 MAP kinase 80, 278, 990 Marfan syndrome 1698 Marine algae 1666 Mass spectrometry 307, 868 Mast cell 1061 Matrix assembly 371 Matrix-assisted laser desorption/ionisation 868 MDR1 1113 Mediated transformation 2043 Megakaryocytic 2008 Melanocortin 434 Melanocortin receptor 434

Melatonin 2129 Membrane rafts 1599 Membrane trafficking 1969 Membranes 1179 Metallo-β-lactamase 2136 Metallocarboxypeptidase 1790 Methyl-binding proteins 721 MFP1 1774 Micro-array chip 1719 Microfibril 1698 Microtubule associated proteins Microtubules 1774, 2069 Mitochondria 356, 636, 815, 1522, Mitochondrial function 1528 Mitochondrial membrane potential 653 Mitosis 1781 Mitoxantrone resistance protein (MXR, BCRP, ABCP, ABCG2) 931 Modeling 148 Molecular evolution 44 Molecular mechanics 2136 Molecular modelling 2136 Molybdenum cofactor 179 Mononuclear ferrous oxygenase 1897 Motif 72 mRNA stability 266 MTOC 1774 Mulitprotein complexes 683 Multidrug resistance 931 Multidrug-resistance-associated protein (MRP) 931 **MUPs 546** Mutagenesis 748 Mutants 1475 Mutation 1301, 2085 Mycobacteria 1461, 2018 Mycobacterium avium complex (MAC) 2018 Myocardium 351 MyoD 571

N-acetyl-L-cysteine 653
N-glycans 1085
N-linked glycosylation 1461
Nanotechnology 1666
NarK 215
Nasal mucosa 823
Natural killer T cells 442
Necrosis 356
Neoglycoproteins 2018
Nerve growth factor 748
Nerve growth factor (NGF) 1021
Nerve transection 538

Myogenesis 571

Myotube 135

Myogenic cells 135

Nervous system development 1036 Neural cell adhesion molecules 1842 Neurocan 1842 Neurodegeneration 844 Neurological disorders 921 Neuron 1950 Neuronal apoptosis 1045 Neuronal cell cycle 1045 Neuronal founder cells 1688 Neuronal signal transduction 1045 Neuronal thread protein 844 Neurotransmitter release 94, 393 Neurotrophic factor 1021 Neurotrophic factors 1061 Neurotrophin 748, 1003, 1014, 1021, 1036, 1045, 1061 New antibiotics 1897 Nicotinamide 2108 Nitrate 215 Nitrate assimilation 165 Nitrate reductase 165, 179, 194, 205 Nitrate respiration 165 Nitrate transporter 225 Nitric oxide 351, 1708 Nitrite reductase 165 Nitrite 215 Nitrite transporter 225 Nitrogen cycle 165 Nitrogenase 61 **NMDA 921 NMR 1572** NO synthase 1350 Nod 1688 Non-coding RNA 960 Nrt1 225 Nrt2 225 NT-3 1054 N-terminal acetylation 1323 Nuclear envelope 1741, 1774, 1781 Nuclear export 266, 1105 Nuclear lamin 1748 Nuclear lamina 1741 Nuclear lamins 1737 Nuclear localization 2129 Nuclear matrix 1758 Nuclear membranes 1737 Nuclear migration 1737 Nuclear pore complex 1758, 1774 Nuclear pore complexes 1737 Nuclear receptor 289 Nuclear transport factor 2 (NTF2) Nucleocytoplasmic transport 1737, 1766 Nucleosome 665 Nucleus 298 Number of folds 72 Nurim 1741 Nutrition and structural support 1418 NXF 1105 **NXT 1105**

O-glycosylation 1386 Obesity 1327 Odor coding 538 Odor map 520 Odorant receptor 531 Odorant-binding protein 503, 823 Olfaction 510, 520, 531, 538, 823 Olfactory bulb 520, 531 Oncogenes 1688 Opioid 1572 Opsin 1583 Organization 2069 Orientation 885 Osmolyte 1572 Oxidative phosphorylation 815 Oxidative stress 990, 1522, 1528, 2-oxoglutarate-dependent oxygenases 835 5-oxoproline 556

P-glycoprotein (MDR1) 931 p14.5 1340 p15 1105 p21 1333 p53 1045, 1333, 1923 p73 1045 p75 neurotrophin receptor 748, 1045 Papain 556 Papillomavirus 1923 Pathogen 1650 Pathogenesis 1698 PATIR-FTIR 885 Pattern formation 1666 Penicillin binding 2136 Peptaibols 1179 Peptide 868, 1572 Peptide-based inhibitors 596 Peptides 1179 Perchloric acid-soluble protein 1340 Peribacteroid membrane 61 Perireceptor events 503 Peroxisome 1344 Phaeodactylum tricornutum 1666 Phagocytosis 1727 Phenylalkanoid 321 Pheromone 823, 1344 Pheromone-binding 503 Pheromones 546 Phosphatidic acid 1674 Phosphatidylinositol (4,5) bisphosphate 1674 Phospholipase D 1674 Phospholipid transfer protein 2098 Phosphorylation 205, 580 Phytocystatins 556 Phytoplankton 1666 Piccolo 94 Pichia pastoris 194 Picket-fence 885 Pig 823

Plant growth and development 1399 Plant nuclear envelope 1737 Plant nucleus 1774 Plant RNA viruses 1547 Plant-microbe interaction 704 Plasma membrane 1399 PMDD 1263 PMS 1263 Podosome 371 Pollen tube elongation and guidance 1418 Pollination 1418

Pollination 1418 Polyamine 1350 Polyamines 244 Polyisoprenol 1461 Polymorphism 1943 Porcine 148

Postsynaptic receptor modulation 760

Pre-eclampsia 1943 Pre-menstrual dysphoric disorder 1263

1263 Pre-menstrual syndrome 1263 Prebiotic chemistry 44

Prebiotic chiral amplification 343 Premature aging 857

Primary neuron culture 844 Prion 1857 Prion disease 259

Pro-inflammatory cytokines 442

Projection 531 Prolactin 1206

Proline-rich protein 1386 Proopiomelanocortin 434

Propagon 1857 Prostacyclin 351 Prostatic carcinoma 307 Proteasome 1442 Protection 1522 14-3-3 proteins 205 Protein 868, 1216 Protein family 72 Protein farnesylation 1636

Protein farnesylation 16.
Protein folding 492
Protein fragment 492
Protein function 794
Protein import 420
Protein interaction 2085
Protein kinase 665
Protein kinase A 2129

Protein kinase G 2129 Protein oxidation 1442 Protein phosphatase 278

Protein kinase C 2129

Protein sorting 420 Protein structure 794

Protein synthesis inhibitor 1340

Proteinases 1234 Proteoglycan 1842 Proteolysis 205, 1442 Proteomics 1323 Proton leak 815 Protoxylem 1430 Pseudoknot 1547 [PSI] 1857 Purification 1167 Pyridine nucleotides 194

Quadrupole 868 Quantitative structure-activity relationship 794

Rafts 1969 Ran 1737, 1766 RanGAP 1774 Ran signaling 1774 Rapid evolution 125 Rat 1263, 1961 Rat brain 636 Rat liver 1141 Rb 1923

Reactive metabolite 1805 Receptor 321, 978, 1014, 1021, 1301 Receptor current 510

Receptor tyrosine kinase 117 Receptor-channel kinetics 760 Recombinant expression 194

Recombination 857 RecQ helicases 894 Redox potential 194 Redpoll 1159 Regeneration 538 Regulated secretion 1067 Regulation 2008, 2069 Regulatory RNA 960 Rejuvenation 2108 Relationships 1121 Releasing factors 1206 Replication 1276

Reporter gene 2043 Reporter genes 1666 Reproduction 546, 1189 Resistance 1897

Respiratory distress syndrome 2098 Restriction-enzyme-mediated

integration 2043 Restriction point 80 Retinol 1491 Retrograde transport 1021 Retrotransposons 1246 Retrovirus 403 Retroviruses 1246 Reverse transcriptase 1246 Rheumatic fever 902 Rhizobia 61

Rho protein 1674 RNA 1276 RNA crystal structure 234 RNA crystallization 234 RNA export 1766 RNA replication 1547 Roscovitine 1333 Rosefinch 1159 RPD3 1715

S locus 1988
S locus glycoprotein 1988
S protein 1988
S receptor kinase 1988
S-RNase 1988

Saccharomyces cerevisiae 1246 Salivary proteins 503

Salt bridges 1216 Schistosomiasis 1350 Scrapie 259 Selective sweep 125 Self-incompatibility 1988 Sensory physiology 510 Serine proteases 596 Sex 1666

Sexual selection 2117 SH2 domain 117 SHP-1 117 SHP-2 117 SHPS-1 117

SHR 1961 Signal transduction 80, 117, 510, 990, 1599, 2053, 2085

Signaling 371, 1969 Silaffins 1666 Silica 1666

Silica deposition vesicle 1666

SIN3 1715 SINA 1715 SIRP 117 Siskin 2117 Siskin 1159

Site-directed delivery 141 Site-directed mutagenesis 194

Skeletal muscle 312 Skeletal myoblast 571 Skin debridement 1234 SLF 902

SLE 902 sLe^x-liposomes 141 SMC 1113 SNARE 393 SOCS 1627 Sorting 1969

Sorting 1969 Sorting signal 1067 South America 2117

Sp1 625 Sparrow 1159

Sparse matrix crystallization 234

Speciation mode 2117 Spectral tuning 1583 Spectrophotometric assay 835 Sphingolipid 1969 Sphingomyelin 2053

Sphingosine-1-phosphate 2053 Spider toxin 1538

Standard metabolic rate 815

STAT 1627 Stellate cell 1708 Stem cells 1150
Stereocentre 1650
Stereoselection 343
Steroid hormone 321
Steroid hormone receptor 1133
Stramenopiles, 1666
Streptozotocin 1141
Stress 266
Structural genomics 72
Structural protein 1430
Structure 748, 1003, 1216, 1276, 1491
Structure and function analysis 194
a4 subunit 1263
Surfactant 2098

SV40 large T antigen 135 SWI/SNF 673 Symbiosis 1167 Symbiosomes 61 Sympathetic neurons 1045 Synapse 94, 393 Synaptic current 760 Synaptic plasticity 1054 Synaptic vesicle cycle 94 Synaptic vesicular release 760 Synaptogenesis 760, 1054 Synaptotagmin 393 Synthetic inhibitors 596

Synthetic inhibitors 596 T cell 1461 Tandem mass spectrometry 1323 TAP 1105 Temperature 1216 Tenascin 1842 Teratogen 1805 Testis 1061 Tetraspanin 1189 TFIIIA 625 Th1/Th2 cells 1879 Thermostability 1216 Thrombosis and metastasis prophylaxis 1234 Throxine 1491 Thyroid 1301 Thyrotropin 1301 Time-of-flight 868 Topographical map 538 Topohydrophobic position 492 Topoisomerase 894 Topoisomerases 857 Tpr 1758

Tpr 1758
Transcription 289, 683, 857, 1014, 2085
Transcription factor 278, 1296
Transcriptional activity 1333
Transcriptional regulation 704, 1758
Trans-Golgi network 1067
Transthyretin 1491
Transition-proliferation-differentation 571
Translation 1276

Transmissible spongiform encephalophathy 259 Transporter 215 Transposase 403 Transposition 403 Transposon-mediated mutagenesis 2043 Treatment 1879 Triad 312 Trichostatin 704 Trichostatin A 721, 1715 Triglyceride 1327 Triose phosphate isomerase 1451 Triple-A syndrome 2085 Triterpenoid 321 Trk 748, 1021 Trk receptor 1045 tRNA-like structures 1547 Trophic 1036 TSA 728 Tuberculosis 1879 Tumor suppressor 1907 Tumour cells 1333 Tumour suppressor protein 1923 Two-dimensional electrophoresis 312 Two-dimensional gel electrophoresis 307, 1323 Ty 1246

Ubiquitin 1442 Ubiquitin-proteasome pathway 990 Ultraviolet 1583 Uncoupling proteins 470 [URE3] 1857 Urea synthesis 477 Urinary proteins 503

Tyrosine phosphorylation 117, 850

Tyrosine kinase 117, 1014

Tyrosine phophatase 117

Vaccination 1879
Valinomycin 653
Variant Creutzfeldt-Jakob disease 259
Vascular tissue 1430
Vimentin 135
Viral oncogene 1923
Visual pigment 1583
Vitamin A 1491
Vitamin D3 1141
Vomeronasal 546
Vomeronasal organ 503

WASP 1607 WD-repeat 2085 Werner Syndrome 857 Werner's syndrome 894 Western blot 653 Withanolide 321 Withdrawal 1263 Wnt 1790 WT1 625

X-ray crystallography 234 X-ray diffraction 234 Xenobiotic oxidation 1805 Xenobiotic 737 Xylem 1430

Yeast 1857

Zea mays 194 Zif268 625 Zinc enzyme 2136

Author Index

Abdallahi, O. M. S., 1350 Abdel-Malek, Z. A., 434 Adams, J. C., 371 Adolfsen, B., 393 Akbar, S., 1708 Alaiya, A. A., 307 Alexander, L. J., 148 Alexander, W. S., 1627 Allard, S. T. M., 1650 Allende, L. M., 1159, 2117 Andersson, I., 1897 Andris, F., 1599 Anzenbacher, P., 737 Anzenbacherová, E., 737 Arnaiz-Villena, A., 1159, 2117 Aron, Y., 1522 Arumäe, U., 1001 Asso, M., 179 Astic, L., 538 Auer, G., 307 Augier, R., 1350 Azarkan, M., 556

Bachelet, M., 1522 Baldwin, J. E., 835 Barbieri, A., 653 Barciszewska, M. Z., 960 Barciszewski, J., 960 Barfull, A., 1961 Bates, S. E., 931 Batetta, B., 1113 Bauer, J., 420 Baus, E., 1599 Beier, K., 1344 Belicchi, M., 135 Bensalem, H., 1350 Benson, M. D., 1491 Berezovsky, I. N., 492 Berger, B., 403 Bergman, T., 307, 1323 Berks, B. C., 165 Beschin, A., 801 Bilej, M., 801 Bing, R. J., 351 Bishayee, A., 1141 Blasco, F., 179 Bonatesta, R. R., 1113 Booms, P., 1698 Boonstra, J., 80, 990 Booth, F. W., 1150 Bosio, C. M., 1826 Bottiglieri, C., 823 Boucheix, C., 1189 Bourne, P. C., 321 Bowler, C., 1666 Bowmaker, J. K., 1583

Brandazza, A., 823

Brändstedt, S., 307

Braunschweig, M., 148 Breer, H., 501 Brennan, C. M., 266, 546 Bresolin, N., 135 Bretscher, P. A., 1879 Brosch, G., 704 Brotzu, G., 1113 Brown, P., 259 Buendia, B., 1781 Burn, J. E., 1475 Butte, M. J., 1003 Buzas, E., 850

Caccuri, A. M., 1451 Campbell, W. H., 194 Campenot, R. R., 1021 Cannon, J., 1950 Cant, C. A., 117 Cappai, A., 1113 Carosella, E., 1943 Carver, F. M., 645 Caudron, N., 2069 Cecconi, F., 1688 Cederlund, E., 1323 Chakravarthy, M. V., 1150 Chatterjee, D., 2018 Chatterjee, M., 1141 Chatterjee, S., 1969 Chen, K. Y., 2108 Chertov, O., 978 Cheung, A. Y., 1418 Chomilier, J., 492 Cockcroft, S., 1674 Collas, P., 1781 Colter, M. B., 148 Comi, G. P., 135 Cooper, S., 580 Corbett, A. H., 1766 Corti, S., 135 Courvalin, J.-C., 1781 Crisma, M., 1179 Crosas, B., 1323 Crump, C. M., 1067 Cullin, C., 1857 Cuoghi, B., 653

Dausset, J., 1943
Davies, K. J. A., 1442
Day, D. A., 61
De Baetselier, P., 801
de Graaf, B., 1418
De Groot, N., 960
de la Hermosa, M. A., 1961
de la Monte, S. M., 844, 1950
De Reggi, M., 1350
de Vos, A. M., 748
Dechat, T., 1758
Declercq, W., 356

Del Bo, R., 135 DeLisi, C., 72 Dell, G., 1923 Denecker, G., 356 Desideri, A., 1451 Dessi, S., 1113 Devriendt, K., 1296 Diagana, M., 1350 Di Meo, S., 1528 Dinan, L., 321, 1121, 1133 Dobosy, J. R., 721 Dresbach, T., 94 Druley, T. E., 931 Dubus, A., 835

Edamatsu, H., 1636 Egevad, L., 307 El Moussaoui, A., 556 Epand, R. F., 1179 Epand, R. M., 1179 Erdmann, V. A., 960 Ernfors, P., 1036

Falconi, M., 1451 Falus, A., 850 Fantacci, M., 823 Farrés, J., 1323 Fechter, P., 1547 Felix, S. B., 141 Feng, K., 1842 Fernandez, A., 571 Fernández, E., 225 Fernandez-Bellot, E., 1857 Ferrara, L., 823 Fini, C., 823 Fink, H.-W., 1 Florentz, C., 1547 Foisner, R., 1758 Formaggio, F., 1179 Franciosi, S., 921 Frère, J.-M., 835 Fricker, L. D., 1790 Frings, S., 510 Froemming, G. R., 312 Fülöp, A. K., 850

Galleni, M., 2136 Galván, A., 225 Garner, C. C., 94 Gaston, K., 1923 Gau, C., 1636 Gharib, B., 1350 Ghosh, S., 2098 Giordano, G., 179 Giegé, R., 1547 Giraud, M.-F., 1650 Goring, D. R., 1988 Graessle, S., 704 Grafström, R. C., 1719 Grimm, D. R., 148 Grittner, C., 141 Grune, T., 1442 Gruss, P., 1688 Gu, F., 1067 Guigliarelly, B., 179 Guillén, J., 1159, 2117 Gundelfinger, E. D., 94

Haas, D., 403 Haeberl, S., 1538 Hamilton, J. A., 1491 Harel-Bellan, A., 728 Hart, M. K., 1826 Hashimoto, R., 485 Havas, K., 673 Hedberg, J. J., 1719 Hegyi, K., 850 Hellström, M., 307 Hernandez, M. E., 1562 Hickson, I. D., 894 Hiltbrunner, A., 420 Hirschberg, D., 1323 Hocart, C. H., 1475 Hochberg, A., 960 Holbrook, E. L., 234 Holbrook, S. R., 234 Hollósi, M., 343 Holmer, L., 1741 Höög, J.-O., 1719 Horky, M., 1333 Horvat, A., 636 Hulleman, E., 80 Hunt, D. M., 1583

Ichikawa, A., 850 Ikeda, K., 485 Iossa, S., 477 Ismail, N., 1879 Iuchi, S., 625 Izaurralde, E., 1105

Jenkins, D., 1943 Jiang, C., 1636 Job, D., 2069 Jonsson, A., 1323 Jonsson, A. P., 868, 1323 Jörnvall, H., 307, 1323 Joyce, S., 442 Jung, D.-J., 289 Justman, Q., 1067

Kajiwara, K., 485 Kämpfer, U., 1538 Kanazir, D. T., 636 Kang, S., 2043 Kanjilal, N. B., 1141 Kanouchi, H., 1340 Kaplan, D. R., 1045 Karsten, U., 141 Kato-Stankiewicz, J., 1636 Kaushal, S., 2098 Keller, B., 1430 Keller, C., 665 Kessels, M. M., 94 Kessler, F., 420 Khoo, K.-H., 2018 Kieliszewski, M. J., 1386 Kile, B. T., 1627 Kim, H. K. W., 148 Kitzmann, M., 571 Kojo, S., 485, 1727 Kopp, P., 1301 Koppaka, V., 885 Korsching, S., 520 Kotala, V., 1333 Krude, T., 665 Kuhn-Nentwig, L., 1538 Kulkarni, A. P., 1805 Kumar, S., 1216 Kuno, T., 278 Kuroi, R., 485

Lai, M. M. C., 1276 Lamarine, M., 492 Lamotte-Brasseur, J., 2136 Lamport, D. T. A., 1363 Langridge, J., 307 Lebel, M., 857 Lee, F. W.-H., 1715 Lee, H.-J., 835 Lee, J. W., 289 Lee, M.-H., 1907 Lee, S.-K., 289 Lee, Y. C., 289 Legendre, P., 760 Lehrmann, H., 728 Leo, O., 1599 Li, D., 2085 Li, Z., 135 Liang, C.-C., 2008 Libby, P., 4 Linder, S., 307 Litman, T., 931 Littleton, J. T., 393 Liu, D.-P., 2008 Liverini, G., 477 Lloyd, M. D., 835 Loidl, P., 663, 704 Looze, Y., 556 Lowy, E., 1159, 2117 Lupowitz, Z., 2129 Lynas, J. F., 596

MacKintosh, C., 205 Magalon, A., 179 Majumdar, S., 2098 Malagoli, D., 653 Marchese, S., 823 Mariani, C., 1418 Marmorstein, R., 693

Martinez Muñoz, C., 990 Masullo, P., 1528 Mate, A., 1961 Matuoka, K., 2108 Maurer, H. R., 1234 May, R. C., 1607 Mayor, S., 1969 McAllister, A. K., 1054 McCarthy, T., 1943 Meek, S. E. M., 205 Meier, I., 1774 Meng, Y., 321 Menon, J. N., 1879 Metsis, M., 1014 Miller, F. D., 1045 Minor, T., 1708 Moir, J. W. B., 215 Moir, R. D., 1748 Mollica, M. P., 477 Moody, D. B., 1461 Moreau, P., 1943 Mornon, J.-P., 492 Mulas, M. F., 1113 Mullins, E. D., 2043

Na, S.-Y., 289 Nagy, A., 850 Naismith, J. H., 1650 Navarrini, A., 823 Neame, P. J., 148 Neely, T. R., 1950 Neet, K. E., 1021 Nentwig, W., 1538 Newman, D., 1562 Nijs, M., 556 NikeziÊ, G., 636 Nurminsky, D. I., 125 Nussinov, R., 1216

O'Brien, M., 1943 Ogryzko, V. V., 683 Ohanian, J., 2053 Ohanian, V., 2053 Ohlendieck, K., 312 Ohtsu, H., 850 Oka, T., 1340 Oliver, P., 470 Oppenheim, J. J., 978 Oppermann, M., 307 Ottaviani, E., 653 Owen-Hughes, T., 673

Paganoni, S., 135 Palou, A., 470 Pancholi, V., 902 Paolini, S., 823 Parés, X., 1323 Paul, C., 556 Paul, P., 1943 Paulin, D., 135 Peggion, C., 1179 Pelosi, P., 503, 823 Pennington, J. S., 645 Pennington, S. N., 645 PetroviE, S., 636 Petruzzo, P., 1113 Picó, C., 470 Pile, L. A., 1715 Planas, J. M., 1961 Podlech, J., 44 Polesskaya, A., 728 Polla, B. S., 1522 Poole, P. S., 61 Poopalasundaram, S., 1583 Porter, R. K., 815 Post, J. A., 990 Power, C. A., 1879 Prosperi-Meys, C., 2136 Putzolu, M., 1113

Qualmann, B., 94 Quimby, B. B., 1766

Randell, E. W., 1327 Rauch, U., 1842 Reznik, S. E., 1790 Richardson, D. J., 163, 165 Rimler, A., 2129 Ringli, C., 1430 Roberts, R., 2085 Robinson, P. N., 1698 Roblick, U., 307 Rogers, B., 1327 Rosendahl, L., 61 Rothardt, G., 1344 Rothery, R. A., 179 Rubinstein, E., 1189 Rudinger-Thirion, J., 1547 Ruiz-del-Valle, V., 1159, 2117 Russell, D. A., 165 Ryser, U., 1430

Saarma, M., 1001 Saha, B. K., 1141 Salani, S., 135 Samson, W. K., 1206 Sanna, F., 1113 Sanyal, S. N., 2098 Sarang, Z., 1719 Sariola, H., 1061 Sarker, S. D., 321 Saucier, D., 538 Savchenko, T., 1121 Scala, S., 1666 Scaloni, A., 823 Scarlato, G., 135 Schachter, H., 1085 Schaller, J., 1538 Schofield, C. J., 835 Schönbeck, U., 4 Schürch, S., 1538 Selker, E. U., 721

Sharma, N., 2098 Shayman, J. A., 580 Shen, Y., 298 Shi, S. T., 1276 Shibley Jr., I. A., 645 Showalter, A. M., 1361, 1399 Shpak, E., 1386 Shringarpure, R., 1442 Shuntoh, H., 278 Silva, N. F., 1988 Sio, S. O., 278 Smith, E., 1327 Smith, S. S., 1263 Soboll, S., 477 Spadaccini, R., 1572 Spangenburg, E. E., 1150 Spann, T. P., 1748 Spiro, S., 165 Stahn, R., 141 Stefani, D., 1159 Stein, W. D., 931 Steitz, J. A., 266 Strazzer, S., 135 Strnad, M., 1333 Stroppolo, M. E., 1451 Strotmann, J., 531 Sugiura, R., 278

Tachibana, H., 1340 Takenawa, T., 2108 Tamanoi, F., 1636 Tanaka, K., 1727 Tang, X.-B., 2008 Taylor, C. J., 165 Taylor, M. M., 1206 Temussi, P. A., 1572 Terwisscha van Scheltinga, A. C., 1897 Thomas, G., 1067 Thomas, T., 244 Thomas, T. J., 244 Timmermann, S., 728 Tokuda, G., 1167 Tokumaru, S., 485 Tolentino, R. B., 321 Toniolo, C., 1179 Torreele, E., 801 Torrente, Y., 135 Tóth, S., 850 Trbusek, M., 1333 Tryggvason, S., 1323 Tyerman, S. D., 61

Uldrijan, S., 1333 Ullrich, A., 117 Urbain, J., 1599 Usui, Y., 1727 Uzonna, J., 1879

Vajda, T., 343 Valegård, K., 1897 Valiron, O., 2069 van den Elzen, R., 2117 Van Esch, H., 1296 Van Laethem, F., 1599 Van Regenmortel, M. H. V., 794 Vandenabeele, P., 356 Varela, P., 1159 Vayssier-Taussat, M., 1522 Vázquez, C. M., 1961 Venditti, P., 1528 Vercammen, D., 356 Verkleij, A. J., 990 Verrips, C. T., 990 Vincentelli, J., 556 Vlcek, S., 1758 Voigt, B., 1133 Vojtesek, B., 1333 Vondracek, M., 1719

Walker, B., 596 Walukiewicz, H. E., 234 Wands, J. R., 844, 1950 Wärngård, L., 1719 Wassarman, D. A., 1715 Watanabe, H., 1167 Watanabe, T., 850 Wie, G., 1879 Wenzel, K., 141 Whitehouse, I., 673 Whiting, P., 321, 1121, 1133 Wiesmann, C., 748 Wilhelm, F.-X., 1246 Wilhelm, M., 1246 Wilkie, S. E., 1583 Williamson, R. E., 1475 Wilson, J. A., 1826 Wilson, K. L., 1737 Wintjens, R., 556 Wolfner, M. F., 1737 Wood, N. J., 215 Worman, H. J., 1741 Wounters, J., 2136 Wu, H., 1418 Wu, H.-Y., 1907 Wu, M., 298

Yamada, K., 1340 Yang, D., 978 Yang, H.-Y., 1907 Yoshikawa, H., 347

Zamora, J., 1159, 2117 Zeisig, R., 141 Zhai, Z., 298 Zhang, C., 72 Zhao, Y., 298 Zhou, X.-H., 1842 Zisapel, N., 2129



